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April 30, 1999

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

Magalie Roman Salas
Federal Communications Commission
The Portals
445 Twelfth Street, S.W.
12th Street Lobby, TW-A325
Washington, DC 20554

Re: WRNN-TV, Kingston, NY
Supplement to Petition for Rulemaking

Dear Ms. Salas:

On behalf of WRNN-TV Associates Limited Partnership, licensee of WRNN-TV, Kingston, New York, enclosed for filing is a Supplement to the Petition for Rulemaking, originally filed on April 20, 1998, to change the digital television Table of Allotments to specify Channel 48 in lieu of Channel 21 at Kingston and to modify the station's license accordingly.

Please contact this office if there are any questions.

Respectfully submitted,

Todd M. Stansbury

cc: Richard French, Jr.
Pamela Blumenthal, FCC
Gordon Godfrey, FCC
John Morgan, FCC
Nazifa Naim, FCC
Nai Tam, FCC

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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, DC 20554

In the Matter of	)	
	)	MM Docket No. _____
Amendment of Section 73.622(b)	)	RM-_____
Digital Television Table of Allotments	)	
(Kingston, New York)	)	

SUPPLEMENT TO PETITION FOR RULEMAKING

WRNN-TV Associates Limited Partnership ("WRNN"), licensee of WRNN-TV, Kingston, New York, by its attorneys, hereby submits this Supplement to its Petition for Rulemaking ("Petition"), dated April 20, 1998, to amend the digital television ("DTV") Table of Allotments by substituting Channel 48 for Channel 21 at Kingston, changing WRNN-TV's DTV reference coordinates, and modifying the station's license accordingly. As shown herein, the proposed modification is fully consistent with the Commission's Rules and would further the public interest by reducing unmasked interference overall to other facilities, mitigating the impact of DTV on Low Power TV services, and promoting generally the availability of digital television services by improving WRNN-TV's interference-free service area.

WRNN-TV is an independent television station that currently operates on NTSC Channel 62, which is outside the core DTV spectrum. Because WRNN does not have the luxury afforded most other television stations of being able to return to their original NTSC channels, it is imperative that WRNN-TV receive a DTV channel that provides the greatest opportunity for a successful transition to digital operation.

As noted in the original Petition for Rulemaking, WRNN-TV's DTV Channel 21 would result in substantial interference caused and received. In particular, 63,197 people would receive unmasked interference, most of which would be caused to noncommercial educational station WLIW(TV), Garden City, New York.[1] A WRNN-TV service on Channel 21 service also would force a co-channel low power television station to terminate current operations.[2] Moreover, WRNN-TV would receive interference to approximately 20% of its currently-licensed NTSC service area.[3]

To mitigate these substantial problems, the Petition proposed to change WRNN-TV's DTV allotment from Channel 21 to Channel 48, which would benefit the public by eliminating all interference to WLIW and the operational low power station and improving WRNN-TV's DTV service area.[4] The Petition acknowledged that the proposed omni-directional DTV Channel 48 pattern would cause unmasked interference to two authorized television stations that already received interference in excess of 10% to their existing service areas – unbuilt WYDN (NTSC Channel 48), Worcester, Massachusetts, and WEDW (NTSC Channel 49), Bridgeport, Connecticut. WRNN stated, however, that interference to these stations could be

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1 Petition at 4.

2 *See* Technical Exhibit at 6, attached hereto.

3 Petition at 4.

4 *Id.* WRNN had earlier sought to change DTV Channel 21 to Channel 48 in a petition for reconsideration of the Commission's *Advanced Television Systems Sixth Report and Order*. The Commission denied the request on general procedural grounds, but invited WRNN to resubmit the proposal for consideration "under [the Commission's] rules and regulations for maximization of DTV facilities." *Advanced Television Systems, Memorandum Opinion and Order on Reconsideration of the Sixth Report and Order*, 13 FCC Rcd 7418, 7548 (1998).

reduced to *de minimis* levels by using a directional antenna.[5] The purpose of this Supplement is to more specifically describe the proposed Channel 48 facility and demonstrate that the allotment of Channel 48 to WRNN-TV would fully comply with the Commission's interference standards and criteria for maximization of facilities.

As shown in the attached Technical Exhibit, the proposed Channel 48 would comply with the "ten percent/two percent" interference standard in Section 73.623(c)(2) of the Commission's Rules.[6] Specifically, using a "cardioid" antenna pattern with an effective radiated power of 200 kw from the proposed reference coordinates at 41° 29' 19" N.L., 73° 56' 52" W.L., WRNN-TV would cause no excess unmasked interference to any other station. The unique interference to each of WEDW and WYDN would be reduced to 0.0%.[7] Overall, the Channel 48 facility is predicted to cause unique interference to only 30,739 people currently served by operational facilities, which is a net *decrease* of 32,458 from the number of people predicted to receive unique interference from the allotted Channel 21 facility.[8]

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5 Petition at 5-7.

6 Technical Exhibit at 4-5.

7 As noted in the Technical Exhibit (at 4-5), 264 of the 3,156,000 people within the WEDW service area would be predicted to receive unique interference, which under the Commission's processing guidelines results in no cognizable interference (less than 0.0%). *See Public Notice, Additional Application Processing Guidelines for Digital Television (DTV)*, Aug. 10, 1998, at 8 (specifying procedures for rounding). Interference to WYDN would be completely eliminated due, in part, to a recently-authorized downgrade and relocation of the station's transmitter. Technical Exhibit at 5.

8 *Id.* Even if authorized but unconstructed facilities are considered (*i.e.*, a permit to upgrade WNJN(TV) (NTSC Channel 50), Montclair, New Jersey), the number of people predicted to receive interference from WRNN-TV on Channel 48 would be 59,166, which still results in a net decrease (4,031) compared to operations on Channel 21. *Id.* at 5, Figure 2.

Channel 48 also would provide principal community coverage to WRNN-TV's current city of license, Kingston, New York, as specified in Sections 73.623(c)(1) and 73.625.

In addition to complying with the Commission's Rules, the proposed Channel 48 allotment would provide substantial public interest benefits. First, operation on Channel 48 would result in a net increase in interference-free DTV service to 5,931,013 people, consistent with the Commission's goal of promoting the availability of digital television. Moreover, the improved coverage would greatly facilitate WRNN-TV's prompt transition to digital by providing a much stronger financial base to support the extraordinary costs of building a new state-of-the-art transmission plant. WRNN also would be able to hasten the delivery of the first digital service to Kingston.

Second, operating on Channel 48 would completely eliminate the significant interference that the allotted Channel 21 would cause to co-channel noncommercial educational station WLIW. Changing to Channel 48 would avoid the otherwise needless interruption in service to almost 60,000 viewers within WLIW's service area.

Third, use of DTV Channel 21 would force the displacement of low power television station W21BU, Catskill, New York. In contrast, operation on Channel 48 is not predicted to cause interference to any currently-authorized low power facility.[9] Thus, the modified allotment would further the Commission's policies of mitigating the impact of DTV operations on secondary services.[10]

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[9] Technical Exhibit at 6.

[10] *Advanced Television Systems, Sixth Report and Order*, 12 FCC Rcd 14588, 14652-53 (1998).

In sum, the operation of WRNN-TV on Channel 48 would fully comply with the Commission's Rules. The modified allotment also would decrease overall interference caused to other stations and enhance WRNN-TV's DTV service to Kingston and the surrounding region. WRNN reiterates its commitment to file an application for a construction permit and to construct the digital facility promptly upon grant of this Petition and Supplement. Therefore, the Commission should change the DTV allotment at Kingston to Channel 48 as described in Figure 1 (Sheet 1) of the Technical Exhibit and modify WRNN-TV's license accordingly.

Respectfully submitted,

WRNN-TV ASSOCIATES LIMITED PARTNERSHIP

By: _____

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Its Attorneys

April 30, 1999

TECHNICAL EXHIBIT
PREPARED ON BEHALF OF
WRNN-TV ASSOCIATES LIMITED PARTNERSHIP
IN SUPPORT OF A SUPPLEMENT TO THE PROPOSAL TO
MODIFY THE DTV ALLOTMENT TABLE
STATION WRNN-TV
KINGSTON, NEW YORK

Technical Summary

This technical narrative and associated exhibits have been prepared on behalf of WRNN-TV Associates Limited Partnership ("WRNN") in support of a supplement to its pending proposal to modify the DTV allotment of WRNN from channel 21 to channel 48. The purpose of this supplement is to provide technical parameters for the channel 48 proposal which permit compliance with the FCC's rules concerning DTV allotment changes. In addition, it is also demonstrated that the channel 48 proposal will result in a "net" increase in interference-free DTV coverage to 5,931,013 persons, and will result in a "net" decrease in unique (unmasked) interference caused to other DTV and NTSC assignments of 4,031 to 30,739 persons. Finally, it is demonstrated that the channel 48 proposal will have less adverse impact to existing or authorized TV Translator/LPTV stations than the current channel 21 DTV allotment.

Background

WRNN is the licensee of full-power TV station WRNN at Kingston, New York (BLCT-851224KF). Station WRNN currently operates on UHF TV channel 62 (758-764 MHz) with a directional antenna maximum ERP of 5000 kW (37 dBk) and an antenna height above average terrain (HAAT) of 591 meters.

In the 6th Report and Order in MM Docket No. 87-268 (6th R&O), WRNN was allotted channel 21 for its DTV allotment. WRNN filed a Petition for Reconsideration in the 6th R&O (Petition) requesting that channel 48 be substituted for WRNN's channel 21 DTV allotment. In the Memorandum, Opinion and Order concerning reconsideration and clarification of the 6th R&O in MM Docket No. 87-268 (MO&O), the FCC denied the WRNN Petition to modify its DTV allotment. In denying the WRNN Petition, the FCC indicated that such requests to modify DTV facilities are "to be addressed under our rules and regulations for maximization of DTV facilities." [1]

Subsequently, WRNN filed a request to modify its DTV allotment to specify channel 48 in lieu of channel 21 pursuant to the DTV maximization rules (DTV Modification Request). It was proposed to relocate the DTV reference coordinates of WRNN from its current site to Latitude 41°29'19", Longitude 73°56'52". A hypothetical channel 48 operation was proposed with a nondirectional ERP of 200 kW and an HAAT of 381 meters.

WRNN's DTV Modification Request included an interference analysis which indicated that the proposal would cause unique interference to the NTSC operations of WYDN on channel 48 at Worcester, Massachusetts and WEDW on channel 49 at Bridgeport, Connecticut. Furthermore, as both WYDN and WEDW were calculated to receive interference in excess of 10% of their existing service

[1] See paragraph 399 of the MO&O.

areas, WRNN's DTV Modification Request also indicated that use of a directional antenna would permit reduction of the interference to "de minimus" levels. As detailed below, this supplement provides a directional antenna pattern for WRNN's proposed channel 48 DTV operation which provides the requisite interference protection towards WYDN and WEDW as well as towards all other NTSC and DTV assignments.

WRNN Proposed Ch. 48 DTV Operation

WRNN proposes to allot channel 48 at Latitude 41°29'19", Longitude 73°56'52". It is proposed to operate with an antenna radiation center height above mean sea level (RCAMSL) of 504 meters, an antenna radiation center height above average terrain of (HAAT) of 381 meters and a directional antenna maximum ERP of 200 kW. An Andrew type ATW30H3-HSC1-S "cardioid" antenna will be utilized with the major lobe oriented at 290° true.

Figure 1 provides the technical specifications for the proposed channel 48 DTV operation, including a tabulation (Sheet 2) and polar graph (Sheet 3) of the proposed directional antenna pattern horizontal plane relative field values.

Proposed Channel 48 Interference And Service

Figure 2 provides a summary of interference and service for the proposed channel 48 allotment. Determination of interference and service was based on the procedures outlined in OET Bulletin No. 69 and criteria contained in Sections 73.622 and 73.623 of the FCC's rules.[2]

It is believed that the proposed channel 48 operation is in full compliance with the FCC's 2%/10% interference criteria. As noted in WRNN's DTV Modification Request, the FCC's DTV allotment table indicates that NTSC station WEDW on channel 49 at Bridgeport, Connecticut would receive interference to 10.2 percent of the population within its existing NTSC service area, and NTSC station WYDN on channel 48 at Worcester, Massachusetts would receive interference to 13.9 percent of the population within its authorized NTSC service area. Under the DTV maximization rules, no new interference can be caused to any station currently receiving interference to 10 percent of its existing service area.

With respect to WEDW, unique interference is calculated to 264 persons within the WEDW Grade B contour. The FCC indicates the WEDW Grade B contour contains 3,156,000 persons. Therefore, the proposed channel 48 DTV operation will cause interference to

[2] The proposed channel 48 DTV allotment will also comply with the city coverage requirements contained in Section 73.625(a).

0.0084% of the total population within the WEDW Grade B contour. Based on the rounding method detailed on page 8 of the FCC Public Notice entitled "Additional Application Processing Guidelines for Digital Television (DTV)", 0.0084% rounds to 0.0%. Therefore, the proposed channel 48 DTV operation complies with the "no new interference" requirement towards WEDW.

With respect to WYDN, the proposed operation does not cause any unmasked interference. It is noted that WYDN's construction permit was recently modified to relocate transmitter site and reduce facilities (BMPET-930914KL). The interference calculations were based on WYDN's modified construction permit.

As shown on Figure 2, the proposed channel 48 operation would cause unique (unmasked) interference to 30,739 persons currently served by operational stations, and 59,166 persons if all authorized but unconstructed facilities are considered. The WRNN DTV Modification Request indicated that the channel 21 DTV allotment would cause unique interference to 63,197 persons. Therefore, adoption of the channel 48 allotment proposal will result in a "net" decrease in unique interference caused to other DTV and NTSC assignments of at least 4,031 persons, and of 30,739 persons served by operating stations.

As depicted on Figure 2, the proposed channel 48 operation will provide interference-free DTV coverage to 7,663,013 persons. The FCC estimates that the current channel 21 DTV allotment will provide interference-free

DTV coverage to 1,732,000 persons. Therefore, adoption of the channel 48 allotment proposal will result in a "net" increase in interference-free DTV coverage to 5,931,013 persons. Figure 3 is a map which depicts the noise-limited 41 dBu contour and areas of received interference (NTSC and DTV) for the proposed channel 48 operation.

LPTV Impact

Studies indicate that the proposed channel 48 operation will not result in the displacement of any existing or authorized TV translator or LPTV stations. However, the current channel 21 DTV allotment will result in the displacement of LPTV station W21BU which is currently authorized to operate on co-channel 21 at Catskill, New York (BPTTL-960517MX; permittee: WSKG Pub. Telecommunications Council) from a site located 1.2 kilometers from the existing WRNN site. As a result, adoption of the channel 48 allotment proposal will have less adverse impact to existing or authorized TV Translator and LPTV stations.

Conclusion

Channel 48 can be substituted for the current DTV channel 21 allotment of WRNN in compliance with the FCC's rules concerning DTV allotment changes. In addition, the channel 48 proposal will result in a "net" increase in interference-free DTV coverage to 5,931,013 persons, and will result in a "net" decrease in unique

(unmasked) interference caused to other DTV and NTSC assignments of 4,031 to 30,739 persons. Finally, the channel 48 proposal will have less adverse impact to existing or authorized TV Translator/LPTV stations than the current channel 21 DTV allotment.

W. Jeffrey Reynolds

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April 19, 1999

TECHNICAL EXHIBIT
PREPARED ON BEHALF OF
WRNN-TV ASSOCIATES LIMITED PARTNERSHIP
IN SUPPORT OF A SUPPLEMENT TO THE PROPOSAL TO
MODIFY THE DTV ALLOTMENT TABLE
STATION WRNN-TV
KINGSTON, NEW YORK

Horizontal Plane Relative Field Values
for Proposed Andrew ATW30H3-HSC1-S Directional Antenna

Azimuth (Deg. T)	Relative Field	Azimuth (Deg. T)	Relative Field
0	1.000	180	0.809
10	0.993	190	0.922
20	0.979	200	0.979
30	0.922	210	0.993
40	0.809	220	1.000
50	0.695	230	0.995
60	0.605	240	0.970
70	0.501	250	0.941
80	0.357	260	0.940
90	0.232	270	0.967
100	0.192	280	0.989
110	0.196	290	0.995
120	0.192	300	0.989
130	0.232	310	0.967
140	0.357	320	0.940
150	0.501	330	0.941
160	0.605	340	0.970
170	0.695	350	0.995

TECHNICAL EXHIBIT
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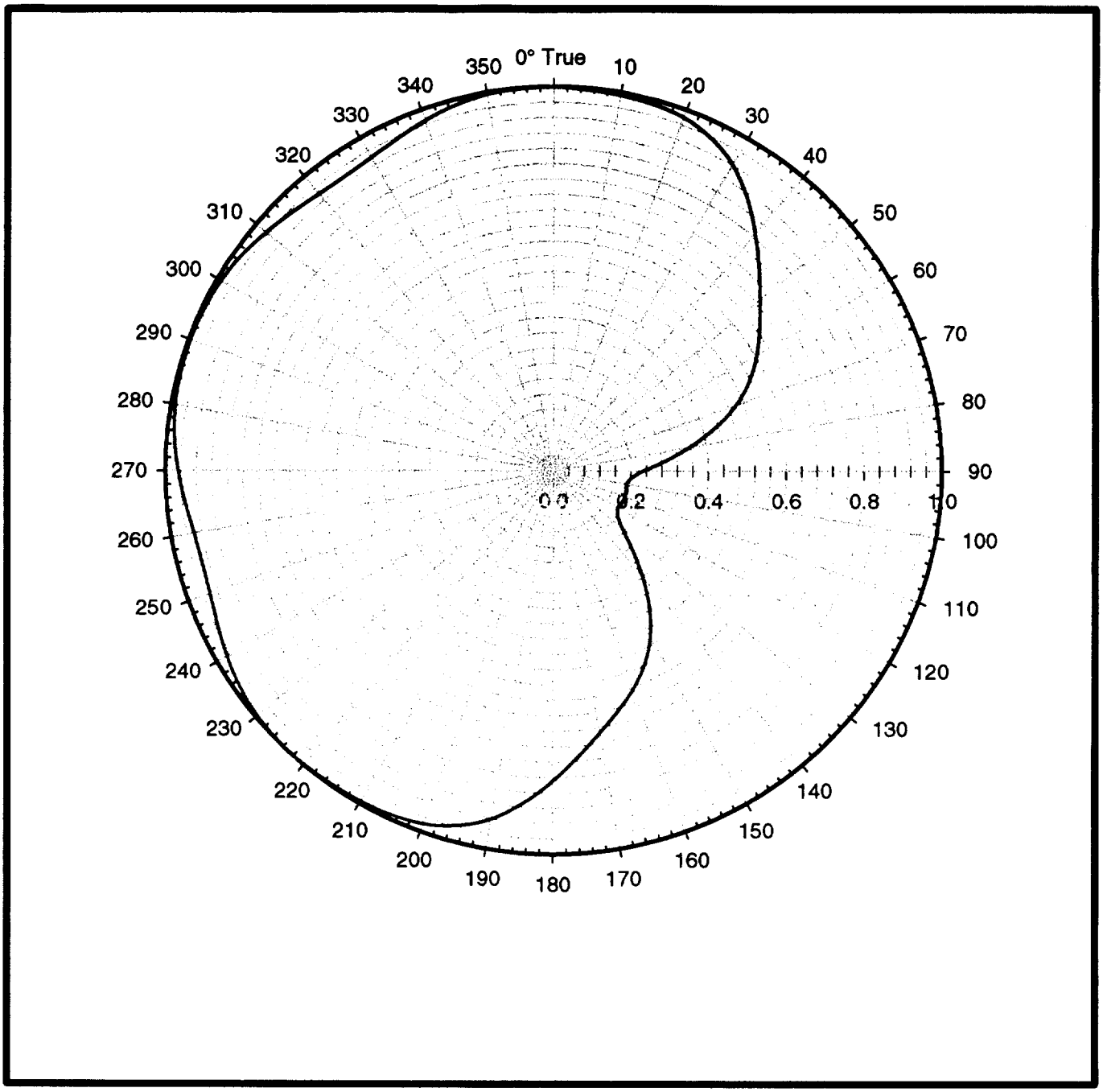
WRNN-TV ASSOCIATES LIMITED PARTNERSHIP
IN SUPPORT OF A SUPPLEMENT TO THE PROPOSAL TO
MODIFY THE DTV ALLOTMENT TABLE
STATION WRNN-TV
KINGSTON, NEW YORK

Horizontal Plane Relative Field Values
for Proposed Andrew ATW30H3-HSC1-S Directional Antenna

Azimuth (Deg. T)	Relative Field	Azimuth (Deg. T)	Relative Field
0	1.000	180	0.809
10	0.993	190	0.922
20	0.979	200	0.979
30	0.922	210	0.993
40	0.809	220	1.000
50	0.695	230	0.995
60	0.605	240	0.970
70	0.501	250	0.941
80	0.357	260	0.940
90	0.232	270	0.967
100	0.192	280	0.989
110	0.196	290	0.995
120	0.192	300	0.989
130	0.232	310	0.967
140	0.357	320	0.940
150	0.501	330	0.941
160	0.605	340	0.970
170	0.695	350	0.995



HORIZONTAL PLANE RELATIVE FIELD PATTERN

STATION WRNN-DT
KINGSTON, NEW YORK
CH 48 200 KW (MAX-DA) 381 M

du Treil, Lundin & Rackley, Inc. Sarasota, Florida

Figure 2

TECHNICAL EXHIBIT
PREPARED ON BEHALF OF
WRNN-TV ASSOCIATES LIMITED PARTNERSHIP
IN SUPPORT OF A SUPPLEMENT TO THE PROPOSAL TO
MODIFY THE DTV ALLOTMENT TABLE
STATION WRNN-TV
KINGSTON, NEW YORK

Interference and Service Summary

I. Interference Caused

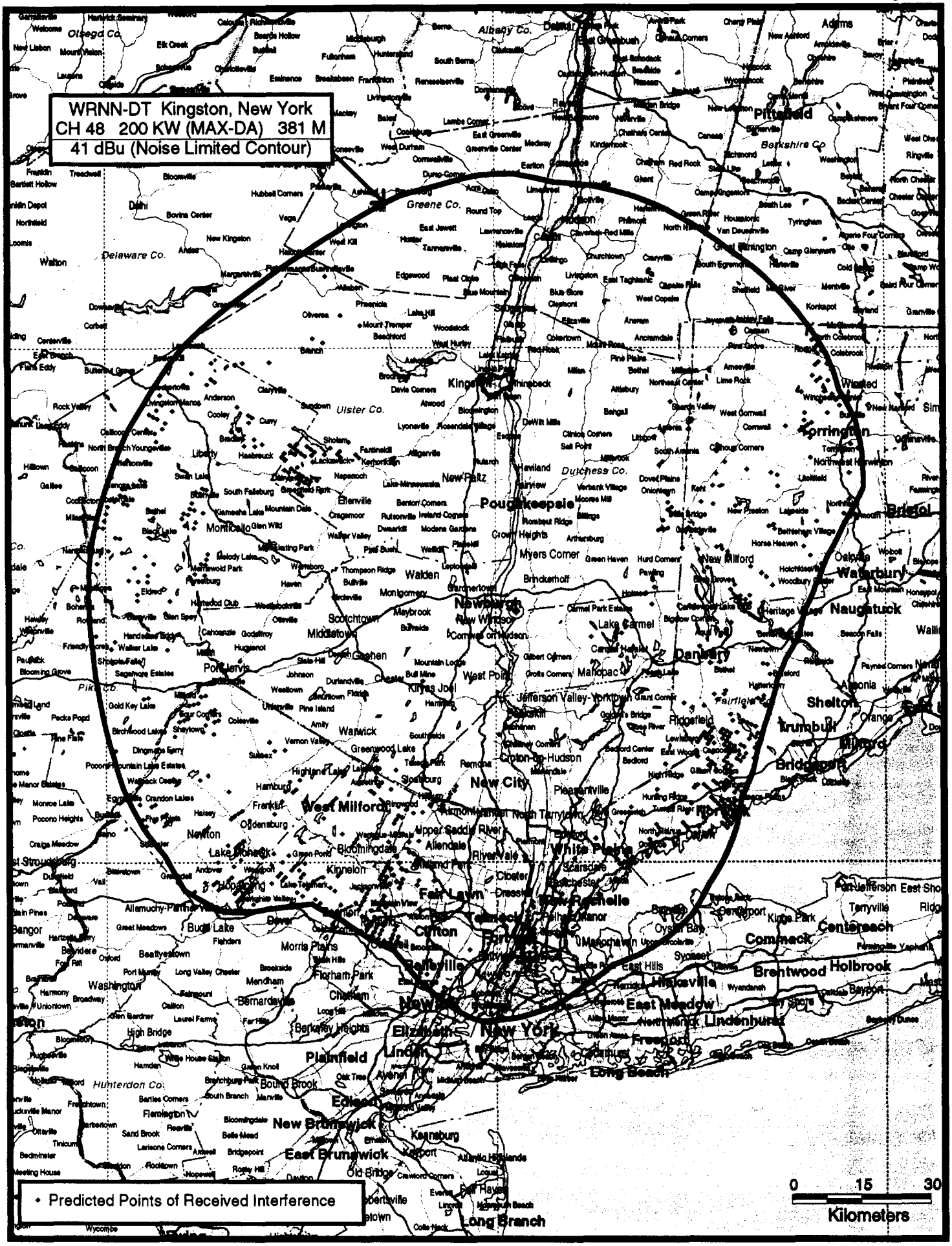
Station Interfered With	Unique Interference	
	1990 Census Population	% of Total Population Within Grade B Contour
WNJU, NTSC Ch. 47, Linden, NJ	5,737	0.0
WGTW (CP), NTSC Ch. 48, Burlington, NJ	20,549	0.3
WEDW, NTSC Ch. 49, Bridgeport, CT	264	0.0***
WNJN, NTSC Ch. 50, Montclair, NJ	4,189*	0.0
WNJN (CP), NTSC Ch. 50, Montclair, NJ	32,616**	0.2
Total Unique Interference	***59,166***	

*Not considered in interference total.
**Considered in interference total.
***The calculated percentage is actually 0.0084% [(264÷3,156,000)x100] which rounds to 0.0% when rounded to the nearest 0.1% pursuant to the FCC Public Notice issued August 10, 1998 entitled "Additional Application Processing Guidelines for Digital Television (DTV)".

II. Service

	Population
Within Noise Limited Contour	8,994,875
Not Affected by Terrain Losses	8,683,127
Lost to NTSC Interference	1,020,114
Lost to DTV Interference	0
Total Service	***7,663,013***

Figure 3


WRNN-DT Kingston, New York
CH 48 200 KW (MAX-DA) 381 M
41 dBu (Noise Limited Contour)
• Predicted Points of Received Interference
0 15 30
Kilometers